

Valentine, Greg

From: Valentine, Greg
Sent: Monday, November 14, 2016 12:19 PM
To: Julian Centeno
Cc: Firoj Vahora
Subject: City of Dripping Springs - TX0136778 (WQ0014488003)

Julian,

Following further review of the above referenced draft permit and a letter from the citizens group, Protect Our Water, we have additional questions and/or information requests.

Tier 2 Antidegradation Review

1. According to 30 TAC 307.5(b)(2), "No activities subject to regulatory action that would cause degradation of waters that exceed fishable/swimmable quality are allowed unless it can be shown to the commission's satisfaction that the lowering of water quality is necessary for important economic or social development." Additionally, in an Interoffice Memo from Lili Murphy, Standards Implementation Team to Municipal Permits Team (July 12, 2016) it was stated that, "no significant degradation of water quality is expected in Onion Creek, which has been identified as having high aquatic life uses." Based on the "high aquatic life uses" statement, TCEQ should require the City of Dripping Springs to conduct a review to show that the discharge is needed for important economic or social development. Has the permittee conducted an economic or social development review for this draft permit? If so, please provide. If not, please have the permittee conduct this review. This is especially important since it has been shown that the City of Dripping Springs has alternatives to discharging to Onion Creek (i.e., the current system of discharging via subsurface irrigation as well as future plans to expand the subsurface irrigation to other portions of the area (map in draft permit application)).

2. There is concern that the effluent limits proposed in the draft permit would contribute more than 450 pounds of phosphorus (P) per year in a phosphorus limited stream with a currently estimated annual load of approximately 1 pound of P annually. Additionally, the stream has a Total Nitrogen (N) load of 37 pounds per year and the proposed discharge would increase this to approximately 88,000 pounds of Total N annually (according to the letter from Protect Our Water, dated September 21, 2016). Please provide any information that shows that these increases would not negatively impact the receiving waters, or that they are incorrect.

Tier 1 Antidegradation Review

3. There is also concern with the values used in the QUAL-TX modelling. Specifically, for base flow, sediment oxygen demand (SOD), and chlorophyll-*a*.

BASE FLOW: The MOA between TCEQ and EPA, requires a value of 0.0 ft³/s to be used for intermittent streams (absent site-specific data) and a value of 0.1 ft³/s for perennial streams (absent site-specific data). The applicant used 0.3 cfs to represent critical low-flow.

SOD: The MOA requires a kinetic value of 0.35g/m²-day to be used. However, the applicant used 0.1 g/m²-day.

Chlorophyll-*a*: The MOA requires that chlorophyll-*a* should be set at 0.0 µg/L (absent site-specific data) in order to set the minimum levels. However, the applicant included a modeling run assuming a chlorophyll-*a* concentration of 2 µg/L. The modeling run predicted a dissolved oxygen (D.O.) value of 5.0 mg/L. This chlorophyll-*a* number seems inappropriate.

Please check that the appropriate values are used throughout the QUAL-TX modelling and provide appropriate information that can be reviewed by EPA. Also, re-run QUAL-TX modelling if the appropriate values were not used and provide the results.

4. According to 30 TAC 307.4(e), "Nutrients from permitted discharges or other controllable sources must not cause excessive growth of aquatic vegetation that impairs an existing, designated, presumed, or attainable use." Onion Creek is presumed high aquatic life use and primary contact recreation and is used for recreational activities such as swimming, fishing, and boating. The increase in nutrients to the receiving waters will likely result in additional algal growth. Additionally, Tier 1 requirements state that surface waters must be maintained in an aesthetically attractive condition, and require that waste discharges not cause substantial and persistent changes from ambient conditions of turbidity or color (30 TAC 307.4(b)(4) and 30 TAC 307.4(b)(5)). Please provide appropriate information showing that the draft permit will not cause or contribute excessive nutrients to the receiving waters that would violate the above listed requirements of a Tier 1 antidegradation review.

Endangered Species Act (ESA) Review

5. I provided a copy of the above referenced draft permit to the United States Fish & Wildlife Service for their review on October 17, 2016. I am still awaiting their results. Upon receipt, I may have additional questions or information requests.

My Due Date is: **Monday, November 28, 2016**

Greg Valentine
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